3. Recommended Application Range

Select valves with platinum-iridium or tantalum valve springs, based on the intended application. The instrument can be used for the following dispensing media:

Dispensing medium	Valve springs: Pt-Ir	Valve springs: Ta
Acetic acid	+	+
Ammonia solution	+	+
Bromine	+	+
Hydrochloric acid	+	+
Hydrofluoric acid*	+	-
Hydrogen peroxide	-	+
Nitric acid	+	+
Perchloric acid	+	+
Phosphoric acid	+	+
Sodium hydroxide, 30 %	+	-
Sulfuric acid	+	+
Water	+	+

⁺ suitable - not suitable

* Note:

Hydrofluoric acid reacts slightly with sapphire resulting in mildly elevated aluminum values. To reduce these values we recommend discarding 3-5 dispensings of 2 ml each before performing the analysis. Compounds containing fluorine, such as NaF, attack tantalum.

The above recommendations reflect testing completed prior to publication. Always follow instructions in the operating manual of the instrument as well as the reagent manufacturer's specifications. In addition to these chemicals, a variety of organic and inorganic saline solutions (e.g., biological buffers), biological detergents and media for cell culture can be dispensed. Please call us if you need information on chemicals that are not named in the list. Status as of: 0216/2